THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

No. 37. BALTIMORE, MD. JANUARY 9, 1838. Vol. IV.

☞This publication is the *successor* of the late **AMERICAN FARMER,** and is published at the office, at the *N. W. corner of Baltimore and North streets, over the Patriot office,* at TWO DOLLARS AND FIFTY CENTS *per annum,* if paid within one month from the time of subscribing, or $3 if after that time. All letters to be post paid.

TUESDAY, BALTIMORE: JANUARY 9, 1838.

TO OUR AGRICULTURAL READERS.

As examples of successful culture serve to inspire a spirit of emulation, we should be happy to receive from each of our friends who have been successful in any article of culture, communications descriptive of the same; and the debt of obligation would be still greater, if they would give us accounts of their respective modes of cultivation. We hope that the diffidence of no agricultural reader will be permitted to prevail over his sense of duty to the cause of husbandry.

COTTON.

We are happy in perceiving by the news received by the packet ships from Liverpool, that the cotton market was active, and the price had advanced about 1*d.* per pound. This will be gratifying to our southern cotton growing readers, and, we rejoice at it, *first,* because, every advance in the value of this greatest staple of our country, serves to reduce the balance of trade against us, and consequently to equalize the exchanges between our country and Great Britain; and *secondly,* because, together with the increase in the last year's crop, it will relieve, in a great measure, the people of the south from their embarrassments.

A GOOD YIELD OF CORN.

We learn, upon authority of the first respectability, that the Hon. Judge *John Buchanan,* Chief Justice of the Court of Appeals of Maryland, made off of 50 acres of land, the present season, 700 barrels of corn, being 14 barrels to the acre. —This, for the size of the field, is an extremely large product, and shows what an intelligent farmer, who has the moral courage to rise superior to the trammels of prejudice, is capable of achieving, and it shows too, that, with proper culture, one acre is capable of being made to yield more grain than is now produced on two acres, if the proper pains be taken to develope the capacities of the earth. To us it has always been obvious, that the plan of putting in large crops, without the least attention to the proper preparation of the soil and after culture, was not only a mista ken notion, but a most pernicious practice. If by judicious management one-half the usual quantity of ground can be made to produce as much or more than the whole indifferently tended, it is very plain that the mere saving of labor would prove a fair profit; and we would ask, wherein consists the policy of wasting time and means in the *half cultivation* of a *large field,* when by the *efficient management* of a *small one* much greater product can be obtained?

ANOTHER GOOD YIELD.

Our neighbour, Capt. *Abel S. Dungan,* housed from a field of 15 acres in corn, 160 barrels of good sound corn, with a very small portion of nubbins among it. This is at the rate of 10 10-15th barrels to the acre; and when it is considered that this was produced upon soil not naturally strong, it must be admitted that the greater degree of credit should be conceded to the Captain, for the skilful manner in which he has overcome the obstacles of nature. By the bye, we have generally observed, that intelligent sea captains have almost invariably made good farmers.

AGRICULTURAL SCHOOLS.

We are sincerely gratified to find by the proceedings of the House of Delegates of this state, that the Committee on Agriculture have been directed to inquire into the expediency of establishing *Agricultural Schools* in the several counties of this State. This motion, though not decisive of the success of the measure proposed, or, indeed, of any other, is pleasing, because it indicates an interest on the part of the House in the agricultural community, highly honorable to them.

While we have pen in hand, we will say that there is another subject which we could have wished to have seen included in the order in question—we mean the establishment of *Agricultural Societies,* under the patronage of the State. —The states of New-York and Massachussetts, have each passed laws, appropriating a sum annually, equal in amount to such sum as may be raised by the citizens of any county in these states, respectively, for their organization and support of such Agricultural Society as may be organized therein. This paternal care, on the part of these states, has had the most beneficial effects, and has been the happy means of improving the soils, and breeds of domestic animals, more within the last few years, than had been effected for a quarter of a century prior to their creation: —Indeed, improvements in every department of husbandry have been brought about with the most astonishing rapidity, as is evinced by the numerous *premiums* awarded for various crops, whose greatly increased products, if not well attested, would challenge the belief of credulity itself. —Among the premiums awarded, we have seen them for 136½ bushels of corn to the acre, 41½ bushels of wheat, 80 bushels of oats to the acre, 500 and 600 bushels of potatoes, and 1000 and 1200 bushels of mangle wurtzel. What, we would ask, but the liberal policy before referred to, could have engendered that spirit of enterprise and emulation, which have ensured these noble and salutary results? As the main wealth of every state arises from the labors of those engaged in agriculture, it has always appeared to us not only to be the province, but the duty of legislatures, to endeavor by their measures to foster this interest and develope its resources. If by such policy only twenty per cent. can be added to the productive ability of the soil, how great would be the aggregate of wealth, and the degree of comfort conferred upon the public. If we were to be called upon to form an estimate of the average of corn produced per acre in this State, from the best information within our possession, we would say, it did not equal 5 barrels, and certainly there is no one acquainted with the culture but will admit that, with ease, these very fields might be made to yield 10 barrels per acre. If this be the fact, and we think no one will venture to controvert it, we would ask, is it not worthy of an effort by our lawgivers to endeavour to effect it? —We are certain that there never has been an Agricultural Society located in any county, in any country, where it has been well conducted, but has wrought the most favorable changes in the

course of culture previously pursued. Indeed, it could not be otherwise, as all meetings of such bodies serve to concentrate and bring together the intelligence and enterprise of the several districts; the members, by an interchange of sentiments and comparison of views, impart to each other information of the first importance. The laudable struggle, too, for premiums, enlists a generous spirit of emulation, as worthy of the actors as are its effects salutary and wholesome. Each member, whether successful or otherwise, returns to his homestead filled with ambition to succeed at the next meeting of his society; he husbands his resources of manure and labor, and by pursuing a judicious and well conceived course of culture, in a few years makes *one acre* produce what it had required *two* to do before, thus increasing his sources of competency and wealth, and adding immeasurably to the comforts and happiness of his family.

In conclusion, we would be permitted to indulge in the fond hope, that the present Legislature of Maryland will not adjourn without enacting such laws as will promote the welfare of the agricultural community, whose true interests have been too long neglected, and whose depressed condition calls for prompt and efficient relief.

[From the Silk Culturist.]

BOTSFORD'S SILK MACHINERY.

By the following letter from Mr. Botsford, we are pleased to learn that he has at last, perfected his machinery, and will soon submit it to the inspection of silk manufacturers. From the description of it, it will be seen that it is adapted to the manufacture of sewing silk, twist, organzine, tram, &c. and on account of its simplicity and cheapness is within the reach of silk growers of the most limited means. Ever since our first interview with Mr. B. at which he explained to us the principles and construction of his machinery, we have had strong faith in its utility, and have regretted that the public should be so long deprived of the opportunity of giving it a trial. Though we consider the growth of the raw material the prominent object at present, yet we have no doubt it will be promoted by the invention of cheap machinery, with which the more simple branches of manufacture may be commenced. Notwithstanding the growth and manufacture of silk, both in Europe and India, are distinct objects of enterprise, and no doubt will ultimately be in this country, yet they may be advantageously united in the infancy of the business, at any rate so far as the manufacture of sewing silk, &c. is concerned. The very great profit on this kind of manufacture will encourage the grower to persevere in his new vocation and give him an additional reward for his labor.

Mr. B. is an early and ardent friend of the silk enterprise in this country, and we hope he will received, what he certainly deserves, a liberal remuneration for his labors in its behalf. Such of our correspondents as have inquired for Mr. B's. machinery, will also be gratified to learn that their orders can soon be filled.

ROXBURY, Ct., Nov. 12th, 1837.

F. G. COMSTOCK, Esq.

Sir,—Having now perfected and fully tested my machinery, I am able to give you and the public that are intere sted, a few particulars respecting it. A machine of 24 spindles will complete sewings, as fast as eight girls can reel; and one doubling machine, cost $5, will answer for sixty. It is easy to calculate what one will perform, of a given number of spindles, as they will stand about two thousand revolutions a minute, that is, any one acquainted with spinning machinery—a new beginner can go on, the first day, and make perfect sewings, and continue for any length of time without even breaking one thread, or entangling a skein; and consequently without any waste at all—and I hesitate not to say, that it is an improvement on all plans in existence, and the only practicable one for new beginners. To accommodate those who wish to commence on a small scale, and would not like to incur the expense of a spinner, I can construct and unite the reel and doubling machine in one frame at a cost of $8.00 with a set of spools, which can be spun off on a common wheel—or, if any have got Dales' reel, it might be made to answer with the aid of my doubler, as that is indispensable and what removes all existing difficulties in the manufacturing of silk. With the aid of my machinery it requires not half the skill to make good thread, as it does from flax.

I have also invented a cast iron stove and pan, that no one will do without after having seen with whatease a person can sit and reel, and keep a proper temperature to the water. The whole apparatus necessary to do business with the greatest ease, will cost $50 00. Comprising reel, double spinner, (both of them combined or built separate); stove and pan, reel to put it into skeins for market, set of spools, &c. A machine of six spindles for the price above named.

Yours, &c.

ISAAC G. BOTSFORD.

P. S. I have omitted one important particular.—The machine is so constructed that you may place a coarse thread to one spindle, and a fine one to the next, and give to each any twist required.

I. G. B.

POLSLEY'S MILLS, Va., Nov. 28th, 1837.

F. G. COMSTOCK, Esq.

Dear Sir,—Having been an attentive reader of the Silk Culturist, as well as many other periodicals on the subject, culture and manufacture of silk, and feeling a deep interest in their success in the United States, and having read of various experiments in feeding worms, and of various fixtures for the worms to wind their cocoons on, I have been induced to try some experiments myself. Although a beginner in the business, it may possibly be some satisfaction to some of your readers, to hear the results of my experiments.—About the twentieth of May last, I hatched about 200 silk worms and fed them about five weeks, when they commenced spinning and made good cocoons.

On the 4th, 5th, and 6th of June, the second crop hatched and fed 30 days, and were healthy, and made 4,000 good cocoons. On the 13th, 14th, 15th, and 16th of June, the third crop hatched, and fed well, and were healthy until the 26th day after hatching, at which time, many of them were attacked with a disease called the yellows, which carried off half of them; the remainder spun their cocoons, 3,000 in number, but they were small, and light. The above worms were from last year's eggs. The fourth crop hatched, on the 29th July, and fed about 26 days, and were very healthy, and made large cocoons. The fifth crop hatched on the 7th, 9th, 11th, and 13th of August, and spun in 26 days after hatching, and were healthy and made good large cocoons. Of the fourth and fifth crops, which made 42 knots of silk on Dales' reel, four threads of which, made good sewing silk. The fourth and fifth crops were from eggs of this year's produce.

It appears, that eggs will not hatch *regularly* the *same season* which they are *laid*. Having read various opinions on that subject, I thought I would try some experiments, and accordingly obtained a few eggs, about the 12th of August in 1836, and exposed them to the common atmosphere, and not one of them hatched that season.

Although some of the same stock from which I got them did hatch, (to the number of about 280) about six weeks or two months before. About the 20th of May, I exposed the few eggs last mentioned, together with about 4,000 of the same stock, and in about a week after, they all hatched out, that is, they hatched on the 4th, 5th and 6th June.

I left about 6 or 8000 eggs, deposited this season, on the hurdles, in hopes that they would hatch, as they were sent for the *two crop, or white worm*, and 300 of them hatched. About the same time, I examined those that were in the cellar, and found that 2 or 300 of them, had hatched also. I then exposed 6 or 7,000 of those in the cellar to the common atmosphere, but not another worm of them hatched this season.

The plan I have adopted for feeding frames is similar to that of Mr. Whitmarsh of Northampton, Mass. with this difference, that instead of having all the hurdles of one size, I have them arranged in the following manner: My hurdle frame is about 3 feet wide, divided as follows—the first hurdle, for the worms when first hatched, is a thin board 13 inches wide, the second hurdle is a frame covered with millinet which is two feet wide, with a paper slide underneath. The third hurdle is a frame covered with net work, four feet wide; and the fourth hurdle is six feet in front covered with net work, and a slide underneath, as above. This plan is designed for successive crops, and answers a good purpose, with one exception, which is, that, when the worms are spining some of the worms are inclined to spin between the net work and paper slides, and by drawing the slides, in order to clean off the litter, you will disturb the worms in their labor, and of course, those so disturbed are lost. But in order to obviate that difficulty, I dropped the slide one and a half inches lower, so that they could not reach from the net work to the paper slides below. I have tried Mr. Whitmarsh's plan for the worms to spin on, and I have substituted small lath for his net

work, and the worms appear better pleased with the lath, than the net work. I have tried the plan of 7-8th inch holes in one and three fourth inch plank. The holes answered a good purpose, but are too expensive unless made by a machine for that purpose.

I have invented a plan, which pleases me better than any I have seen, or read of. It is to take a thick plank, five-eighths of an inch thick, and 7 or 8 inches wide, with legs about one and a half inches long at the bottom edge of the plank, and form shelves by running grooves in each side of the plank, about seven-eighths of an inch apart, and take a thin board, from one-eighth to one-fourth of an inch thick, and slit off pieces wide enough to fill the grooves, and to project about seven-eighths of an inch, so as to form small shelves. This gives them just room to form their cocoons. The worms appear better pleased with this plan, than any other, I have tried, and no litter can fall from one worm on to another, and of course the cocoons are kept entirely free from any litter whatever.

I have made a silk reel after Dales' plan, and have succeeded in reeling about three lbs. of silk, and have manufactured about 500 skeins of sewing silk, a part of which, is said to be as good as most of the imported. The above silk was manufactured on the common wheel, but I intend to get a small spinning machine, before I manufacture much more. I do not expect to make much silk the next season, but the following year I am in hopes I shall be able to make from 40 to 50 lbs. of silk, if I have good luck with my trees and cuttings, as I have Italian and Chinese trees and cuttings, sufficient to stock about three acres of land, which I have lately purchased for that purpose. I shall have about 3,000 Italian trees two years old for sale this fall, or next spring. I would sell them this fall, if called for. I have about 160,000 silk worm eggs for sale also, both of which I will sell as reasonably as they can be had at any regular market.

Yours, &c.

E. NEWCOMB, P. M.

P. S.—Please state in your next number which Spinning Machine you would prefer for a small establishment, *Botsford's* or *Brooks'*.

E. N.

ANSWER BY THE EDITOR.—It is impossible for us to say with certainty which of the machines, Brooks' or Botsford's, we should prefer, as we have not, as yet, seen the latter. A description of it, however, will be found in Mr. Botsford's letter, to which we would refer the inquirer. Mr. Brooks' machine has been hitherto considered the best in use for the manufacture of sewing silk in families, and its merits compared with Mr. Botsford's cannot be correctly estimated until the latter has been tested by experimental manufacturers. Our opinion of it however, will be found in a few prefatory remarks to his letter.

[Correspondence of the Boston Transcript.]

LIFE OF AN ENGLISH NOBLEMAN.

Breccles by Hall, in Lincolnshire, Aug. 1837.

Thus far up the eastern coast again. Here I propose to give you some illustrations of a nobleman's life. I am now staying, by invitation, a day or two, at one of the seats of the Earl of Yarborough. He is not here himself, and I have chosen this season because my especial object was the observing certain operations on the estate. Some of them I touched upon at "Holkam," and as there are several of your readers who are not enthusiastically interested in agriculture, I shall spare them the rest. Suffice it that his Lordship owns about 70,000 acres of land lying here nearly in one body, besides fragments detached. Much of this which is very valuable, is redeemed from bog and swamp.

This coast, like Holland, opposite, is low, and like that, also, industry has made one of the finest countries in the world. See the result in the revenue. The earl is an extremely liberal landlord. His tenants flourish and get rich, from age to age, almost like their master. I know one of them who is worth his half a million of dollars. Yet they pay him I believe, not less than $290,000 per annum—the rent varying from $8 to $5 the acre, on an average of farms. The whole may be said to be under cultivation. What is called poor land, produces its four quarters and a sack, or 36 bushels of wheat; and what is called good, a quarter or two more.

The secret is partly in the earl's own character. He has a strong practical bias of mind, takes a minute, constant interest in the details of the whole estate, and has done a vast deal towards bringing it to its present condition. It was in the situation of President of an agricutural society that I first met him at the Dinner on the Isle of Wight, and I was then astonished at the knowledge he showed in his successive off hand speeches (which were lectures rather) on hedges, stocks of all sorts, and in fact every description of an English farmer's business which came up for notice.

Doubtless he could take one of his farms and manage it as well as any farmer in Worcester can *his*, and a great deal better than he could manage one here. As it is, not being much here, he reserves only a few thousand acres about the Hall, and a large part of this is kept emparked. One may ride 15 miles in the various winding roads upon this ground, always at the edge of the clean greensward, and shaded by lusty old trees, or, if you choose going ahead you may go thirty miles over his lordship's land in a right line—the farm-houses and cottages which you pass, mostly concealed among foliage, but wide, rich fields in all directions, brim full of the ripening grain, waving, as far as I can see, to the tops of the hedges. What a possession is all this for one man—what an item, I should say, in one man's possessions, an estate which, a few years since, as one of the family told me, when the rents, owing to great improvements, were advanced something above 20 per cent, *added*, by that mere hitch, from 50,000 to 60,000 per annum to his Lordship's pin money! But it is time to come nearer home.

The Mansion, in the library of which I now write, is a large high brick building, stuccoed, with two prong-like porches, at one end, one of which serves for the picture gallery, and the other for the servants' abodes. On the whole it is rather a shabby affair—owing, doubtless, to the Earl's favorite seat being on the Isle of Wight. This does well enough for a sort of farm-house, and to come and pass a hunting week or two in the course of the season. With such an understanding, the whole establishment is kept reduced, especially as the Earl has lately taken a fit of *retrenchment*, into his head. In fact I am told there are not above 30 *servants* at this time in the house, instead of the good old allowance of 70 or so, when the family, with their guests, used to be here.

What these 30 contrive to do is of course no affair of mine. I only know that the "Usher" is a very civil fellow, who brings my tea, and that his business consists solely in the charge of the beer. He took me into his cellar last evening and showed me to begin with, 16 enormous butts of 410 gallons, and 32 of 210 each, of various ages. The wine is in like proportion; and there is a fat butler, and eke an under-butler, with a white apron on. Beyond this I have at odd walks made the acquaintance of the brewer's premises, whose establishment, though scarcely noticeable in the little village of buildings that surround the Hall, might be converted into a tolerable gentleman's mansion. It is only his place of business, however. His domestic establishment is somewhere else.

The head blacksmith has one of 40 or 50 acres, and a nice snuggery in the midst. That is a mile or two distant. The head gardener, close by, has also a very good house. He keeps about a dozen men constantly employed. The steward, or chief agent has a still better place—which looks and very much like $3000 a year—with walks and grounds of its own. So have some other officers, including the huntsman. This man's ancestors have been on the estate' in this business probably over 200 years, and his son is now being *educated* for the same. Besides him two kennel-keepers, and two whippers-in must be always on hand for the good reason that the dogs always are. About 40 couples of them occupy, in various forms, what could be called a very decent suite of rooms, 8 or 10 of them, in a long brick building by themselves.

In the stables about 40 horses are kept at present, including 20 or 30 prime hunters, every one of which has a room rather than a groom. Here, therefore, is work for 15 at least. After all, his Lordship does not hunt, though he once did. The establishment is kept up from habit, good feeling for his people, and for those of his family, and others, who may now and then come here for "sport." Of course, it is the same with the dogs and *their* five men. Yet the expense is enormous, for it is with dogs and hunters in England, as pictures and a hundred other things, that if a man keeps at all, he must take pains with and pride in. Doubtless the huntsman has the genealogy of each of these puppies infinitely better preserved than his own. I know of one young nobleman's giving 200 guineas for a dog "of a good family," but I dare say it was an extraordinary case, for he was a *very dogged* amateur.

ADDRESS,

Delivered before the Berkshire Agricultural Society, at their Twenty-seventh Anniversary, Oct. 15, 1837.

BY J. BUEL.—(*Continued.*)

The object of the farmer, in the management of his farming operations, should be, first, to obtain the greatest return for the capital and labor he expends; and secondly, to do this without im-

pairing the fertility of the soil, or the intrinsic value of his farm. To effect these objects, three prominent rules should be observed: The first is, *keep your land dry*; or in other words, free from all superfluous moisture. The second rule is—*keep your land clean*; or in other words, free from weeds. And the third is,—*keep your land rich*; or in other words, return to it, in the form of manure, all the refuse animal and vegetable matter which the farm affords.

Keep your land dry—The importance of draining is not duly appreciated, nor its practice well understood, among us. Although water is indispensable to vegetation, too much of it is as hurtful as too little. It is necessary to the germination of the seed, to the decomposition of the vegetable matter in the soil—to the transmission of the food from the soil to the plant—to its circulation there, and to the maturity of the product. All these useful purposes are defeated, where water remains in the soil to excess—the seed rots, the vegetable matter which should serve as the food of the crop, remains insoluble, in consequence of the absence of heat and air, which the water excludes; or, if the seed grows, the plant is sickly, for want of its proper food, and there is consequently a virtual failure in the harvest. It is not from the surface only that we are to determine whether land is sufficiently dry to support a healthy vegetation; but we are to examine the surface stratum, into which the roots of the plants penetrate, and from which they draw their food. If this is habitually wet—if it grows marshy plants—if water will collect in a hole sunk fifteen inches below the surface—the land is too wet for cultivated crops, and means should be adopted to render it more dry. From my partial acquaintance with this county, I feel assured that much of your best land is rendered unfit for tillage, or the growth of the finer grasses, by reason of the excess of water, which passes or reposes upon the subsoil, unnoticed by the cultivator. These lands are denominated cold and sour, and they truly are so. Cold, sour lands are invariably wet lands below, if not upon the surface. But if the superfluous water was judiciously conducted off by efficient underdrains, (for the construction of which, you possess the best of materials in abundance,) these lands would be rendered warm and sweet, and highly productive, and the outlay would be repaid by the increased value of two or three of the first crops. Wet lands are generally rich lands, abounding in vegetable matters, which water has preserved from decomposition, but which readily become the food of plants, when the water is drawn off. Let me imagine a case, which I am sure will be found to exist in many parts of your county. There is a slope of a hill, half a mile in extent, terminating in a flat 40 rods wide, through which a brook meanders. The soil on this slope, and in this flat, is of a light, porous quality, six to twelve inches deep, reposing on a subsoil impervious to water, as clay, rock, or hard-pan. By soil, I mean the upper stratum, in which vegetable matters are blended with the earthy material, and which constitutes the true pasture of plants. Near the top of this slope, all along on a horizontal level, or perhaps lower down, spouts or springs burst through the subsoil, a thing very common in hilly districts, the waters from which finding an easy passage *through* the loose soil, spread and run down the slope, and *upon the subsoil*, and through the flat, till they find their level in the brook. A thermometer plunged down to the subsoil, will indicate, at midsummer, a temperature probably not greater than 60°, whereas to grow and mature many of our best farm crops, we require a heat in the soil of 70 or 80. How shall we remedy this evil, and render this land profitable to the occupant? Simply by making an underdrain or drains, in a gently inclining direction, a little below these spouts or springs, and, if practicable, somewhat into the subsoil. These will catch and conduct off the spouting waters, and by laying the lower plane dry and permeable to heat and air, develope all its natural powers of fertility.

I will suppose another case—that of a flat surface, underlaid by an impervious subsoil. This is rendered unproductive, or difficult to manage, by *stagnant* waters. The rain and snow waters, penetrating the soil, are arrested in their downward passage. by the subsoil, which not having slope to pass them off, they there remain and stagnate, and putrefy, alike prejudicial to vegetable and animal health. The mode of draining such grounds, and of rendering them productive and of easy management, is, first, to surround the field with a good underdrain, and to construct a sufficient open drain from the outlet to carry off the waters. Then with the plough, throw the land into ridges of twenty to thirty feet in breadth, according to the tenacity of the soil, in the direction of the slope, and sink an underdrain in each of the furrows between the ridges, terminating them in the lower cross drain. The materials of the underdrains, which are generally stones, should be laid so low as to admit of the free passage of the plough over them. The superfluous water, by the laws of gravitation, settle into these drains, and pass off, and the soil becomes dry, manageable and productive. An acquaintance called upon a Scotch farmer, whose farm had been underdrained in this way, and being informed that the improvement cost sixteen dollars an acre, tile having been used, remarked that it was a costly improvement. "Yes," was the farmer's reply, "but it costs a deal *mair not to do it*," which he illustrated by pointing to an adjoining farm, like situated, which had not been drained, and was overgrown with rushes and with sedge grass, and then to his own fields, teeming with luxuriance, and rich in the indications of an abundant harvest.

I have dwelt upon the subject of draining with more detail, because I have personally realized its benefits, ahd am sure it may be extensively gone into with the certain prospect of reward.

Keep your land clean—Weeds being generally indigenous, or well acclimated, are gross feeders, and exhaust the soil more in proportion to their size than cultivated crops. We should consider that farmer a reckless manager, who should suffer strange cattle to consume the food prepared for his farm stock. How much more is he deserving the name of an economist, who permits his crops to be robbed of their food, and consequently stinted in their growth, by thistles, daisies, dock and pig-weed?

An idea prevails with some, that weeds, by the shade they afford to the soil and to crops, prevent the exhalation of moisture in times of drought. Precisely the reverse is the case. They exhaust the moisture of the soil in proportion to the surface of their leaves and stems. Some plants, it is affirmed, daily draw from the earth, and exhale from their superficies, more than their weight of moisture.

Keep your land rich—This is to be done by manuring, by pasturing, and by alternating crops. Most of this county, I believe, is devoted to cattle and sheep husbandry, for which it seems well adepted; and these branches of husbandry afford ample means of enriching the soil and enlarging the grain and root crops. Cattle and sheep make manure; manure makes grain, and grass, and roots—these in return feed the family, and make meat, milk and wool; and meat, milk and wool are virtually money, the great object of the farmer's ambition, and the reward of his labors. This is the farmer's magic chain, which, kept bright by use, is ever strong and sure; but if broken or suffered to corrode by neglect, its power and efficiency are lost.

You possess all the earthy elements of a good soil: clay, sand and lime. It is *your* province, and *your* duty to husband and apply the vegetable and most essential element of fertility—*manures*. These are as much the food of your crops, as your crops are food for your cattle, or family; and it is as vain to expect to perpetuate good crops, without manure, as it would be to expect fat beef and fat mutton, from stinted pasture or buckwheat straw. We see, then, that manures are the basis of good husbandry, whether we have reference to tillage or cattle farms; and that tillage and cattle reciprocally benefit each other.

It results from these facts, that a farmer should till no more land than he can keep *dry* and *clean*, and *rich*; and that he should keep no more stock than his crops will feed well, and that can be made profitable to the farm.

The farmer who makes but thirty bushels of corn, a dozen bushels of rye, or a ton of hay, from an acre of land, and there are not a few who fall short of this, is hardly remunerated for his labor: but he who gets these measures from half an acre, and every good farmer ought at least to do so, realizes a nett product of one half the value of his crop, or receives twice as much for his labor as the first does. The reason of this is, that the one permits his acre to become poor, either from not saving and applying his manure, or from spreading it and his labor over too much land, or by cropping it too long, while the other keeps his land rich, and thereby saves his labor. How is this disparity increased, when, instead of being double, the crop of the good farmer exceeds that of the bad farmer four-fold, incidents that very often happen on adjoining farms? If the latter gets one hundred dollars per annum for his labor, the former gets four hundred dollars for his labor. No inconsiderable item this, in the aggregate of a man's life, or in the profit and loss account of a large farm.

So with our animals. The food which parsimony, or indolence, or ill judged economy, doles out to a beast, and which barely *keeps* him two years, would, if judiciously fed out, fatten him in six months; and thereby convert three quarters of the food into meat, milk and money, which, in the other case, is expended to keep the animal alive. Time is money, as well in fattening animals and feeding crops, as in other expenditures of human labor.

Pasturing is a means of inducing fertility. It is computed to add twenty per cent. to the fertility of a first rate soil. This arises from two causes. All that is grown upon the soil, is returned to it in the droppings of the animals which graze upon it. And in the second place, when broken up by the plough, the sward is converted into food for tillage crops, and has been found to be equivalent, in a well set sod, to more than twelve loads of dung on the acre. In this way sheep husbandry is known to enrich lands rapidly. But this remark does not apply to meadows where the crop is carried off, and no equivalent returned to the soil, in the form of manure.

Alternation of crops is unquestionably one of the best and most economical means of preserving fertility, and of increasing the profits of the farm. All crops exhaust the soil more or less, of the general elements of fertility, though not to the same extent, nor do all exhaust it alike of certain specific properties. It is believed that every family of plants requires a specific food, which other families do not stand in need of, and which they do not take up. This is evinced by the fact that wheat cannot be grown profitably, in ordinary grounds, in two successive years, upon the same field, without a great falling off in the product. And it is now laid down as an axiom, in good husbandry, that two crops of any small grain, should never be taken from the same field in successive years, because they draw too largely upon the same specific food. But after an interval of four or five years, in which grass and roots intervene, the specific food of the wheat crop has so accumulated in the soil, that this grain may then be again profitably grown upon it. So with all other farm crops, not even excepting the grasses. The law of natural change in the products of a soil is so palpable, that in Flanders and Holland, where flax is one of the most profitable staples, they do not think of cultivating this crop upon the same ground, oftener than once in 10 or 12 years. Our farmers seem to appreciate these truths in reference to tillage crops, without duly reflecting, that they apply as well to grass as to grain. Meadows do deteriorate; in a few years, the finer grasses run out, because the soil becomes exhausted of the particular food which affords them nourishment; coarse or innutricious plants take their place, and the herbage becomes inferior in quality, and greatly diminished in quantity. Upon an average, old established meadows would yield double their present crops, if judiciously alternated with grain and root crops. The terms "suitably divided into meadow, plough and pasture lands," which are generally employed to recommend farms on sale, are an indication of bad husbandry, and very often betray the secret which compels the owner to sell. Excepting in very stony districts, every acre of land which will produce good grasses, may, by being rendered dry and rich, be made to produce good grain and roots. In the convertible system of husbandry, permanent meadow or plough lands are almost unknown---every field produces in turn crops of grain, grass and roots.

(*To be continued.*)

Without a vigilant supervision of your hands, you cannot expect to succeed, as the best require *driving*.

[From the Genesee Farmer.]

MANAGEMENT OF A FARM.

Mr. Tucker:—Your correspondent P. has requested some information as to the best manner of conducting his farm so as to improve and make it profitable. To give particular directions in such a case you will perceive is impossible, without a more full and minute knowledge of the farm occupied than has been given, and even then much must be left to the judgment of your correspondent. To work a farm successfully, a knowledge of the leading constituents of the soil, and the manner in which it has been treated, is necessary. Some soils are adapted to wheat, while on others it is produced with difficulty, and a quite uncertain crop; on the last the grasses are generally found to flourish, hence are good for grazing. As a general rule it may be said that a farm which will produce good wheat, is capable of producing any other crop of either grass or grain that the owner chooses to put upon it, and is therefore capable of any system of amelioration or improvement that experience or science may have devised. On the supposition that P.'s is of this class, I shall throw out a few hints, which may possibly be useful to him or to others in farming.

Experience has shown, what indeed theory indicated, that the successful management of the soil is most intimately connected with a rotation of crops; and the best manner in which such rotation could be brought about, has engaged the attention of most of the scientific and able farmers of the present time. The doctrine of rotation if founded on the simple but well established law of nature, that different plants require different kinds of food to support them—that they take this food from the soil in variable quantities, and consequently ground when exhausted for one plant, will sometimes produce an abundant growth of another; that such is the fact is shown by every day's observation of the process which governs the growth of plants. It may be remarked also, that plants derive their growth principally from decayed plants, and hence in a rotation of crops particular attention should be given to those that return the most to the soil on which they grow. Reference too must be had to the mode in which plants receive their nutrition. Some spread their roots near the surface of the earth, as wheat, rye, &c., while others, as the tap-rooted plants, draw their nourishment from a greater depth, scarcely throwing out a root near the surface.

Keeping these facts in view, the rotation of crops, and the alternate culture of every part of the farm, instead of ploughing one field year after year, or mowing another, has introduced a new era in agriculture, improving instead of impoverishing the farm, while the products and profits have in many instances more than doubled. In the system of rotation, the course of plants required for its completion must in some measure depend on the time to be gone through, whether four or six years, or, as is sometimes the case where immediate profits are required, only two or three are allowed. In Pennsylvania, where the system has reached great perfection, the course, as stated in the Farmer's Reporter, is as follows:—Corn the first year; this is always planted on sward ground, carefully ploughed one, two or three weeks before the time of planting. The sward is well harrowed without disturbing the sod, marked off with rows three feet apart, in which the corn is planted in hills, one and a half or two feet apart. The corn is plastered when well up, and if too thick is thinned at hoeing. The next crop is oats or barley, sown the succeeding spring. This crop is followed by wheat, the ground being first thoroughly manured with barn yard manure. A rye crop follows the wheat, with which clover seed is sown in March. The clover remains two or three years, and is plastered, when the same rotation commences again.

Mr. Stevens, one of the most successful farmers on the Eastern Shore, Md., has given an account of his system of rotation or what he calls the "seven field system," and which after a long experience of other modes, he decidedly prefers. His farm is divided into seven fields, two of which are every year in corn, two in wheat, two clover, (one for mowing and the other for pasture,) and one, the stock field, vacant. Mr. Stevens says, "you will observe one corn crop annually will be on the clover, therefore as you do not turn in clover for fallow, which I consider of high importance, I would strongly recommend to have the clover field, (after taking therefrom a crop of seed,) reserved unpastured, and turned in, in the fall, as a preparation for corn, by which means you procure all the advantage to be derived from the clover."

In Western New-York, where wheat is the great object, and clover is relied on as the great renovator of the soil, the course of cropping has a direct reference to that object. Where it has been required to make the most money in the shortest time, without reference to exhausting the soil, wheat after wheat has been resorted to, to a considerable extent. Where some regard has been had to the future state of the soil, as well as immediate profit, wheat, clover and wheat, have followed each other; and where the object has been to improve the soil as well as secure profit, a course embracing from four to six years, has been adopted, including wheat, clover, corn and roots. In a former volume of the "Farmer," a farmer of Monroe gave the following account of his system. "My 150 acres of plough land is divided into ten lots of 15 acres each. My course commences in spring with three fields in wheat, the rest all in clover, which is to be ploughed, must be sown with plaster. Fields Nos. 1, 2, 3, in wheat. No. 4, to receive the yard and stable manure, (which must always be the case with the hoe crops,) once ploughed for corn, potatoes, or other roots. No. 5, barley. No. 6, mow for wheat. No 7, pasture for wheat. No. 8, meadow. No. 9, and 10, pasture. Of my 150 acres, 45 of them is annually in wheat;—15 in corn, potatoes or other roots;—14 in barley;—30 in clover preparatory to wheat;—45 for hay or pasture. If the corn ground is sown with wheat, the field which was intended to be mown as fallow may be ploughed in the spring for barley or oats, though the first is by most preferred. The barely stubble should be ploughed twice previous to sowing with wheat. The meadow which is to be sown with wheat, if broken up in July, must be ploughed twice; but if left till August, only once, but very carefully done. The pasture which is intended for wheat ought to

be broken up in June, and twice ploughed."

In the New-England Farmer for 1833—4, is a valuable paper from Judge Buel, detailing his course of four years, and of five, with a particular account of the expense of profits per acre. His four years course commenced in the spring with corn on land thoroughly manured, the sward turned over, rolled, and corn planted. In the fall corn cut up by the bottom, harrowed and ploughed, and sown with wheat. Second year wheat, with turnips after. Third year barley, with ten lbs. of clover seed per acre. Fourth year clover, pasture or mowing. In the five years course;—Indian corn as before. Second year, wheat with ten lbs. of clover seed per acre;—third year clover for mowing—after mowing turned over and ruta baga sown;—fourth year, barley and clover seed as before;—fifth year, clover for mowing or pasture. The manure in all cases to be applied to the corn or the turnips.

We think P. will find in the foregoing examples sufficient direction as to the most approved method of cropping or cultivating his farm so as to make it both durable and profitable. He must, however, bring his own judgment largely into requisition, or he will after all fail as a farmer. Experiments and books furnish results and principles—the application of them must depend on the individual. If his farm is destitute of fruit trees, let him apply to some nurseryman of established probity for a supply, and be careful that the selection is of the best kind, and *adapted to his location.* To plant poor fruit trees because they can be obtained cheaper, is miserable policy, and poor fruit is worse than nothing; and there are locations where expenses in procuring certain kinds of trees would be entirely thrown away, for they will not succeed. If P. wishes stock, let him procure good blood, and good formed animals, and he need not fear the result; the best in such cases are usually the cheapest in the end.

But if after all P. wishes to succeed as a farmer, he must attend to his farm himself. He must see there is a place for everything, and everything in its place; he must say to his laborers, *come, not go;* and he must know by personal observation that there is such a thing as the rising of the sun. With industry, prudence and economy, a farmer cannot fail to grow rich; and an increase of knowledge should be in an equal or increasing ratio.

[From the Genesee Farmer.]

SUCCESSFUL CULTIVATION OF ROOTS.

Mr. Tucker: My business is to work, and not to write for the press, but as you ask communications from the farmer, I will in my plain way, state what I have experienced in the cultivation of the Potato, Ruta Baga, Mangel Wurtzel, Carrot, and Sugar Beet; manner of feeding, storing, &c., and the quantity of roots I raised this season.

The Potato with me for ten years, the last excepted, has been a fair crop, but by adhering to the old method of tillage, has been more expensive than is necessary, as I find by the course I have adopted this season. I planted three acres the 29th and 30th of May; first ploughed, then manured with coarse barn-yard manure; then ploughed again and harrowed. Struck out the rows three feet apart with a one-horse plough, say five inches deep; dropped the seed eighteen inches apart, turned back the furrow, and the work was done. For hoeing first and second time, the cultivator, so gaged as to fill the whole space between the rows, was passed through, followed by the hoe, giving a slight dressing, but making little or no hill, and the whole labor, after the ground was fitted, did not exceed three and a half days' work per acre. By the use of the plough the seed was planted deep; the potato never takes a downward direction. The cultivator loosened and mellowed the earth so as to allow the roots to extend, and to occupy nearly the whole row. *Get an expanding and contracting cultivator. Get one! Get one!!* The product was over 430 bushels per acre; 1300 bushels from the 3 acres.

The Ruta Baga I had cultivated to considerable extent for three years with success. This year I planted three acres in drills twenty-one inches apart, 26th and 27th of June. So soon as up, I sifted house ashes and plaster, mixed in equal quantities, at the rate of fifteen bushels per acre, with wire sieves, row by row, over the whole. The effect more than answered my expectations: that little pest, the turnip bug or fly, or its ravages, was not seen at all, and the growth was most vigorous. One acre of the piece had been planted with carrots, only about one-fourth of which was standing, by reason of the insect, bad seed, or both, and ruta baga was planted in all the vacant places in the rows. They were thinned out, and hoed twice; they soon covered the ground, and the work was done. The product is over 1000 bushels per acre; 3000 bushels the whole, notwithstanding one acre was partially seeded with carrots, and produced 200 bushels. About one acre of the land is fine sandy loam, and the remainder is slate washed from a ravine, all highly manured.

The ruta baga I think draws more from the atmosphere, and less from the soil, than any other vegetable; for I have always found it retained the dew longer, and held it in greater quantities, than any thing else. It leaves the ground in finer condition than any other crop, and cannot be too highly valued. The carrot is excellent for fattening cattle, milch cows, &c. but is not so sure a crop, and requires much more labor in tillage. It does not always come up well, and is very liable to be destroyed by the insect.

The Mangel Wurtzel—Of this root I planted one and a half acre on the 29th and 30th of May, (too late by ten days,) in drills twenty-one inches apart. Thinned once and hoed twice; tillage same as the ruta baga, (ashes and plaster omitted.) About two-thirds of the piece was planted with seed, which proved to be a mixed kind of all the beet family; the other one-third part was the pure seed. The crop was fine, and if all had been of the same kind, the product I think would have been one-fourth larger. But as it was, the yield may be considered a fair one—over 800 bushels per acre, and the whole 1250 bushels. See the importance of having genuine seed, for I have no doubt the product was 200 bushels less than it would have been had all the seed been pure mangel wurtzel Reynolds & Bateham, of Rochester, have sold me genuine seeds, and I should have confidence in any they will sell as such. I am much in favor of this root for feeding—probably it is equal to any, except the sugar beet.

The Sugar Beet—Of this I had only seed to plant six rods of ground. It seems to be well adapted to our soil and climate. The growth was much greater than any thing I have seen of the best kind. I have no doubt it will prove most valuable for feeding cattle, as well as for sugar. The product was over 80 bushels, and at the rate of about 2100 bushels per acre, or 63 tons. I rate all by weight, 60 lbs. to the bushel, for otherwise most of the roots could not be measured with any degree of accuracy. Here follows a statement of the produce of seven and a half and six-one hundred and sixtieth acres of what may be considered first rate corn land, and in a high state of cultivation.

		Whole product.	*Per acre.*
3 acres	potatoes,	1300	433⅓
3 do.	ruta baga,	3000	1000
	Carrots,	200	800
1½ do.	mangel wurtzel,	1250	800
6-160th	sugar beets,	80	2100
7½ acres 6 rods		5830 bushels.	

Five thousand eight hundred and thirty bushels, at 60 lbs. per bushel, give 346,800 pounds, or 176 1-5 tons. The potatoes 13 tons, ruta baga 30 tons, carrots 24 tons, mangel wurtzel 24 tons, and the sugar beet at the rate of about 63 tons per acre. This crop last year would have brought more than $2,300. What the price may be this year I know not. It is not my purpose to sell any, but to feed all to my cattle; so I have my own market, and trust I shall turn them to good account.

I am now feeding thirty-one head, at the rate of one bushel each per day, with hay nights and mornings, in their stalls, with corn and other coarse fodder through the day. I shall add to their allowance as shall seem proper, and change from one to the other now and then. All the cattle eat greedily, and are doing well.

Barn Cellars, Storage of Roots, and Manner of Feeding.

I have two barn cellars under the barn floors, which together hold 3000 bushels. They have each a small door at the back end, and scuttles through the floor—are well pointed and proof against frost. By opening the door and scuttles I can dispel the foul air or gas at pleasure, for large quantities of roots stored in cellars must be ventilated, or they will heat and spoil. These cellars are filled by drawing the loaded cart on the floor, and dumping the load through the scuttles—and the cellar is filled with very little labor.

The remainder of the crop were pulled and buried directly on the ground, such as potatoes, in heaps of about 33 bushels, leaving a small passage at the top, in order that the gas may pass off, without which they will not keep. In these two barns I stable 38 head of cattle, 31 of which are beef cattle, one pair of working oxen, and 5 milch cows—all convenient to feed from the cellars.—The roots are thrown upon the barn floor—cut with large English hay knives, which can be done by a smart man at the rate of a bushel per minute, and are passed to the manger with a scoop shovel. I have heard of cutting machines for

roots—never saw one, nor do I wish to. A good pair of hands, knife, and willing mind, is all the cutting machine I want. Every farmer should have a barn cellar; the cost is but little, and the advantage great. No one can know their value until he has one.

With good cattle, well constructed, clean, well littered stables, plenty of roots, and good hay, with card and curry-comb applied every day, I have fine cattle and good beef. Those roots should be extensively cultivated. They are within the reach of every man who farms any land, even one acre, and can be guaged to his wants. The poor man with his one acre and one cow, can at least plant six rods, and till it when he will do nothing else. See my 80 bushels of sugar beet from like quantity.

Let all raise according to his wants and means of feeding, depending on his own market, and omit raising a portion of other produce which costs him five times as much both in labor and land.—This fact I have made plain in the exhibit of the entire product of two acres of ruta baga, buried directly on the ground as I pulled them, in heaps of say 35 bushels, weight one ton, standing as thick as cocks of hay in common meadows of one hundred each. Twenty to one! To see is to be convinced.

The point to gain is to be able to take the greatest product with least labor from the land, and to return the whole or an equivalent back again.—Keep cattle, raise roots, &c., make manure, and one important point is gained; for with manure I can raise roots, and with roots fed to cattle I can make manure, and can pay back to the land as much as I received from it. I intend in due time to communicate the result of the feeding process this winter, and offer you something on other subjects, provided this effort in your opinion is worth the use of ink and types. Do with it as you please, and I am content.

I am, sir, respectfully, your ob't serv't.,
JOHN SANDFORD.

Marcellus, Dec. 26th, 1837.

FARMERS MUST HAVE THEIR WHEAT MORE COMPLETELY GROUND.

Mr. Holmes—For the purpose of shewing the fact what our wheat was capable of doing when well floured or ground, a very considerable premium was offered by the Kennebeck Co. Ag. Society, to be awarded to the manufacturer of the best barrel of flour ground at any mill within the county of Kennebeck. At the late Cattle Show and Fair, Mr. John Stanley of Winthrop, made an entry, claiming the premium for a barrel which was ground by him at the mill in Winthrop village. When wheat was one dollar per bushel, it was good business to grind it for a sixteenth, but wheat has risen to nearly two dollars per bushel; farmers therefore ought to have their wheat ground as well again as it was then, for they pay as much again—that is, the sixteenth that they now give is worth as much again when put into the market. I am sensible that they do not get their grinding done any better, if they do as well as they did when wheat was only one dollar per bushel. If that is a fact, then you in reality pay as much again, or double what it is worth to get your wheat ground. Are you contented to pay as much again as you ought for flouring? Let us hear what the adjudging committee say about the barrel of flour manufactured by Mr. Stanley. "Only one entry was made, and that by Mr. John Stanley, of Winthrop. We were informed that it was made from five bushels of Tea wheat, strict measure, from which was manufactured *two hundred thirty two and a half pounds of excellent flour;* which is one barrel, thirty-six and a half pounds." Now there must have been more or less coarse, which would not answer to go into that barrel of excellent flour—and there must have been also bran or canal, or whatever it is called, which is eatable by man or beast.

We state the account thus:

One bbl. excellent flour, worth	$10 00
Thirty-six and a half pounds, at the same	1 84
Say 20 lbs. of coarse, at $8 per bbl.	81
Bran or canal, probably 40 lbs. worth say $5 per bbl.	1 02
And the coarsest bran which is worth the grinding, or nearly so,	
	$13 67

Now see what your wheat is worth when a premium of $5 is offered for flouring.

The committee farther remark, "a good specimen of what the farmers of our state can do, and your committee are of opinion that the time is not far distant, if not already come, when we shall not be under the necessity of going to New York to mill." What more is wanting but more and better grinding? A FLOUR-EATER.

P. S. If you will divide $13,67 by 5, it will shew the worth of that wheat, and it will be found to be $2,73 per bushel.—*Maine Farmer.*

Improvement in laying walls——Our friend Adam Mott informs us that he has found it quite an improvement where you build stone wall in low or wet land, to place a piece of cedar or hemlock across the wall every 2 or 3 feet, say 2 feet from the bottom.

It is said that where wood is required to be of great hardness and smoothness, as it sometimes is for mechanical purposes, that boiling it for a few minutes in olive oil, will give that desired property. Such wood is particularly adapted for the wheels of blocks or pulleys.

A HALF DURHAM BULL CALF—FOR SALE.

The subscriber has a beautiful red and white bull calf, HALF DURHAM, being got by a full bred Durham bull, which he sold last December for $300, and out of a very large Cow owned by him. The cow when he bought her was represented as half Durham, but as she has no pedigree he designates her offspring as half Durham. His sire was a noble animal, out of an imported cow, and got in England by one of the Colling's bulls. To any gentleman who may desire an improving cross, and who may be averse to give the higher price of the full bred Durhams, this calf offers an excellent opportunity, as he has all the fine points of the latter, and would be taken by an incompotent judge for a full bred. His price is $30—his age 5 weeks old. EDWD. P. ROBERTS,
oc 3 Baltimore, Md.

GEESE AND TURKEYS.

The subscriber has for sale a few pair of those beautiful white Turkeys, so highly esteemed for sporting gentlemen's lawns. Also the large Westphalian Geese, from Richd. Barnet's stock, BOTH PURE WHITE.
oc 17 5t ROBERT SINCLAIR, sen.

THE ROCKVILLE ACADEMY.

The Classical department of this institution under the care of the Rev. John Mines, is now open under the supervision of Mr. JOHN NESLY, a gentleman of high scholastic attainments, unexceptionable character and considerable experience in the instruction of youth.

The Trustees congratulate the patrons of the Academy, and the public, that the vacancy occasioned by the retirement of their late learned and venerated principal has been so fortunately supplied.

The English departments of this school are under the control of two highly qualified and efficient instructors, Messrs. JOSEPH BRADDOCK and A. M'LEAN SCOTT.

Few Academies in the Country present as many claims to public patronage as this. The number, ability and experience of its Teachers, the variety and extent of their instructions, the health of the country which surrounds it, and the morals of the community in which it is situated, combined with the unusually moderate terms of tuition, concur to recommend it to parents and guardins.

Course of instruction in the Classical Department.

Latin and Greek Language—French if requested—the higher branches of Mathematics—Natural and Moral Philosophy—Geography, with use of maps and globes, &c.

English Department—Reading, Writing, Arithmetic, Grammar, Geography and Mathematics.

Terms of Tuition——In the Classical department, $20 per annum. In the English departments, $8 to 16 per annum.

Board, including washing, may be had in respectable private families for $100.

By order of the Board,
JOSEPH H. JONES, President.
RICHARD J. BOWIE, Sec'y.
Rockville, Montgomery county, Md. Oct. 20, 1837.

ROBERT SINCLAIR'S NURSERY,
AT CLAREMONT, NEAR BALTIMORE.

This Establishment now comprises between 20 and 30 acres, closely planted with a most CHOICE COLLECTION, from ours and foreign countries of the FINEST VARIETIES known—Of Pear, Plum, Cherry, Peach Apple, Quince, Apricot, Nectarine, Grape Vines, Currant, English Gooseberry, Raspberry, Strawberry, English Walnut, Ornamental Trees, including Evergreens, Shrubs and Roses, all very thrifty and of larger size than any former year, especially the Peach, Apple, and Trees suitable for planting in streets.

Also, about half an acre of double Dahlias, now in full bloom, of almost every color and shade. Amateurs are invited to make their selections.

20,000 Morus Multicaulis Mulberry Trees, with large roots, 2 to 7 feet high, at liberal prices, varying according to size.

60,000 Cuttings of do. well ripened wood.

20,000 white Italian Mulberry Trees, 2 years old.

For further information please address the proprietor, near Baltimore. Trees and Plants ordered from him are carefully selected and faithfully packed, and forwarded by land or sea, as directed, and conveyed to the city without charge. Printed and priced catalogues will be sent on application gratis.

R. Sinclair, jr. & Co., Seedsmen, in Light st., act as agents, where necessary.
oc 17 5t ROBERT SINCLAIR, senr.

AMERICAN FARMER.

A few complete sets for sale at this office.

CONTENTS OF THIS NUMBER.

Solicitation to agricultural readers for communications—rise in price of cotton in England—a good yield of corn—another good yield—proposition in the Maryland legislature for agricultural schools—Botsford's silk machinery—life of an English nobleman—judge Buel's address continued—a hint relative to laborers—on the management of a farm—successful cultivation of roots—on the grinding of wheat—improvement in laying wall—to harden wood for mechanical purposes—advertisements—prices current.

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDAY.

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	6 00	7 25
CORN, yellow	bushel	76	78
White	"	75	78
COTTON, Virginia,	pound	11	—
North Carolina,	"	—	—
Upland,	"	10	12
Louisiana —— Alabama	"	—	—
FEATHERS,	pound.	50	—
FLAXSEED,	bushel.	1 37	1 50
FLOUR & MEAL—Best wh. wh't fam.	barrel.	11 00	12 00
Do. do. baker's	"	—	—
Super How. st. from stores	"	9 12	9 25
" " wagon price,	"	8 87	—
City Mills, super	"	8 87	9 12
" extra	"	9 25	9 50
Susquehanna,	"	—	—
Rye,	"	6 50	—
Kiln-dried Meal, in hhds.	hhd.	21 50	22 00
do. in bbls.	bbl.	4 50	4 62
GRASS SEEDS, wholes. red Clover,	bushel.	5 50	6 00
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	3 50	4 00
Orchard,	"	2 50	3 00
Tall meadow Oat,	"	—	3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	12 00	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	6 25	6 50
Slaughtered,	"	6 75	6 87
HOPS—first sort,	pound.	9	—
second,	"	7	—
refuse,	"	5	—
LIME,	bushel.	32	35
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	37	38
PEAS, red eye,	bushel.	—	—
Black eye,	"	75	1 00
Lady,	"	1 00	—
PLASTER PARIS, in the stone, cargo,	ton.	—	3 50
Ground,	barrel.	1 62	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	90	95
Susquehannah,	"	—	none
TOBACCO, crop, common,	100 lbs	2 50	3 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	—	—
" ground leaf,	"	—	—
Virginia,	"	4 50	9 00
Rappahannock,	"	—	—
Kentucky,	"	4 00	8 00
WHEAT, white,	bushel.	1 90	2 00
Red, best	"	1 80	1 82
Maryland inferior	"	1 60	1 70
WHISKEY, 1st pf. in bbls. (REGISTER)	gallon.	43	43½
" in hhds. (REGISTER)	"	42	42½
" wagon price, (REGISTER)	"	bbls	39
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 50	— —
To Wheeling,	"	1 75	—
		washed.	unwash
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35 40	18 20
Three fourths Merino,	"	30 35	18 20
One half do.	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,	"	28 30	18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

Baltimore Md.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured	pound.	13	13
Shoulders, do	"	10½	10¾
Middlings, do	"	do	do½
Assorted, country,	"	9	9½
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"	—	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old	each.	5 00	6 00
COWS, new milch,	"	25 00	40 00
Dry,	"	9 00	12 00
CORN MEAL, for family use,	100lbs.	1 68	1 75
CHOP RYE,	"	—	1 62
EGGS,	dozen.	18	—
FISH, Shad, No. 1, Susquehanna,	barrel.	6 75	—
No. 2,	"	6 50	—
Herrings, salted, No. 1,	"	2 75	2 87
Mackerel, No. 1, —— No. 2	"	9 00	10 00
No. 3,	"	4 75	—
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	9	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	1¼a1½
Other Branches,	do	Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg	do
Banks in Baltimore,	par	Petersburg,	¼
Haggerstown,	¼a	Norfolk,	1¼a1½
Frederick,	do	Winchester,	¼
Westminster,	do	Lynchburg,	1½
Farmers' Bank of Mary'd,	do	Danville,	¼
Do. payable at Easton,	1	Bank of the Valley,	¼
Salisbury, 2 per ct. dis.		Branch at Romney,	do
Cumberland,	3	Do. Charlestown,	do
Millington,	do	Do. Leesburg,	1½
DISTRICT.		Wheeling Banks,	a3½
Washington, Georgetown, Alexandria, Banks,	¼p.c.	Ohio Banks, generally	6a7
PENNSYLVANIA.		New Jersey Banks gen.	5
Philadelphia,	¼a	New York City,	¼
Chambersburg,	1	New York State,	3a4
Gettysburg	do	Massachusetts,	3a3½
Pittsburg,	3½	Connecticut,	3a3½
York,	1	New Hampshire,	3a3½
Other Pennsylvania Bks.	4	Maine,	3a3½
Delaware [under $5]	6	Rhode Island,	3a3½
Do. [over 5]	2	North Carolina,	5
Michigan Banks,	10	South Carolina,	8a10
Canadian do.	10	Georgia,	do
		New Orleans,	12

TRY THE NEW ESTABLISHMENT.

NO MISTAKE!

Every article warranted. 500 Ploughs, right and left hand, from $4 to $20. Also the Hill-side Plough, well adapted to turn down hill. Wheat Fans warranted to take garlic from all kinds wheat. Cutting Boxes for straw, corn fodder, &c. at low prices. Corn-shellers, of different sizes and patterns, $15 to $20. Castings by lb. or ton, to suit ploughs or machinery. All repairs in our line executed with durability, neatness and despatch.

Also, Cline's combined Plough.

J. T. DURDING.

de 12 tf

A DURHAM BULL FOR SALE.

UNCAS, a beautiful white Bull of the improved Durham short-horn breed, 3 years old, will be sold a bargain, $250, as his owner, desirous of changing his cross-bought another bull at the sale of Mr. Whittaker's stock. Uncas has a pedigree tracing to the herd-book, and will be warranted pure.

☞ Applications by letter to be post-paid. Address

s 29 EDWD. P. ROBERTS, Baltimore, Md.

KENTUCKY BLUE GRASS SEED.

Just received from the South West a lot of Kentucky Blue Grass Seed This grass is particularly desirable for pastures and for hay, and forming fine green or rather blue lawns, &c.

R. SINCLAIR, Jr. & Co.,
Light, near Pratt-street, Balt.

FARMERS' REPOSITORY,

PRATT STREET,

Between Charles & Hanover sts. Baltimore, Md.

During the last four years the Proprietor has erected two extensive Establishments for the manufacture of Agricultural Implements generally, including an extensive Iron Foundry, Trip Hammer, &c. With these facilities, and the most experienced workmen, (many of whom have been several years in his employ,) and the best materials, he flatters himself that he will continue to give general satisfaction to his customers, his object is to confine himself to useful implements, and to have them made in the best possible manner and on reasonable terms.

The following are some of the leading articles now on hand, viz. his own Patented Cylindrical Straw Cutters, of various sizes and prices—these machines have never been equalled by a similar machine in any part of the world.

Corn and Tobacco Cultivators
Weldron Grain and Grass Scythes
Farwell's Patent Double Back Grass Scythes and Snathes
Hay Forks and Rakes
Manure Forks, Shovels, &c.
English Corn Hoes
Superior American made Casteel Hoes, with handles
Wheat FANS, of various sizes
Mattocks, Picks and Grubbing Hoes
Corn Shellers
Threshing Machines, with or without horse power
F. H. Smith's Patent Lime Spreaders
A great variety of Ploughs of all sizes, with wrought and cast iron Shares
Swingle Trees and Hames
Also, a great variety of Plough Castings, constantly on hand for sale by the piéce or ton. All kinds of Machine Castings made to order; repairs on Ploughs and Machinery done at short notice
Liberal discount made to those who purchase to sell again.

All kinds of Grass SEEDS and Seed Grain bought and sold by him, and particular attention paid to their quality.

Likewise constantly on hand a general assortment of Mr. D. Landreth's superior GARDEN SEEDS, raised by himself, and warranted genuine. All communications by mail, post paid, will receive prompt attention.

jy 4 J. S. EASTMAN.

MULBERRY TREES.

75,000 Chinese Morus Multicaulis, all on their own bottoms, of various sizes, from one to six feet, at the lowest prices. The wood is well matured and very perfect, and they have become acclimated, by successive propagation in a most exposed location —Prepared Cuttings will be supplied at the lowest rates.

3,000 hybrid short jointed Mulberry, with large leaves, very hardy and on their own bottoms—5 to 6 ft. in height.

20,000 Chinese Morus expanse, with large smooth glossy leaves, very succulent and nutricious, and greatly loved by the worm. This is a most valuable variety for the North, being very hardy, and none more highly esteemed in France. They are engrafted on the white mulberry, which increases their hardihood, and are 5 to 7 feet in height—This is the only engrafted kind.

3,000 Dandolo or Mozettiana Mulberry, 1 and 2 years old from seed, a most excellent variety, with large leaves and very hardy

10,000 Brussa Mulberry, very hardy

25,000 Florence Mulberry, leaves nearly entire

30,000 white Mulberry, 1 to 2 years old

65 lbs. white Italian Mulberry Seed

750 lbs. white and yellow Sugar Beet Seed

☞ Priced catalogues of the above, and of Fruit and Ornamental Trees, Green House plants, Bulbous Flower Roots, splendid Dahlias, and Garden, Agricultural and Flower Seeds, sent gratis to every applicant. Orders sent per mail will meet prompt attention, and the trees be packed carefully and forwarded as desired. Companies or individuals desirous to contract for large numbers of trees will be dealt with on the most liberal terms.

WM. PRINCE & SON.

New York, Nov. 22—28. 4

☞ *The office of the "Farmer and Gardener" is removed to the cor. Baltimore & North sts.*